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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/522,043	03/09/2000	Stephen J Borza	12-19-US-CIP(2)	4238

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EXAMINER	
ZAND, KAMBIZ	
ART UNIT	PAPER NUMBER
2132	

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/522,043	BORZA ET AL.	
	Examiner	Art Unit	
	Kambiz Zand	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 March 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,9,11,12 and 18-20* is/are rejected.

7)☒ Claim(s) *2-8,10,13,16 and 17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 March 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 09/023,460.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. **Claims 1-20** have been examined.

Drawings

2. New formal drawings are required in this application because the Examiner objected to original drawings by the applicant. Fig.1, 1a, 2 and 3 corresponds to number signs that do not have the corresponding definition of the element numbers shown in the figures such as element number 68 in fig.1a that corresponds to "addressing and output generating means". Some element within Fig.4a-5 is hard to read and follow. Examiner suggests definition of figure elements to be typed. Appropriate corrections are requested.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1. 9, 11-12, 14-15 and 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomko (4,876,725) in view of Hoffman (5,706,218).

As per claims 1, 9, 11, 12 and 18 Tomko (4,876,725) disclose a method and a device for using an imaging device comprising an integrated circuit, the integrated circuit having a plurality of imaging sensors in a known arrangement for sensing an image provided thereto and for providing an output signal indicative of the sensed image (see abstract; fig.3b where the integrated circuit of 56 has a arrangement for sensed image of the fingerprint), wherein the output signal comprises a plurality of pixel values each relating to an image sensor from the plurality of imaging sensor, each pixel value of the plurality of pixel values relating to one pixel within the sensed image at a known location dependent upon the location of the related image sensor (see col.5, lines 9-56 where the location depends on the spectrum of the white light source through series of wave lengths), the method comprising the steps of: sensing with a first image sensor of the plurality of imaging sensor (see col.5, lines 14-26), a first signal to provide first sensed data (see col.5, lines 25-26 and 57-59 where the spatial Fourier transforms is formed as a first sensed data), wherein at least a portion of the first sensed data comprises noise presented to or from within the device (see col.5, lines 27-31); sensing with a second image sensor of the plurality of imaging sensor, a second signal to provide second sensed data wherein at least a portion of the second sensed data comprises noise presented to or from within the device; determining a noise based value from the noise portion within each of the first sensed data and the second sensed data; and based on the noise based value (see ncol.6, lines 29-67 where the second sensed image that is reflected of the first is compared to the first fingerprint or sensed image by correlation

between of reflecting of Fourier transform of the prints at the face of prism from the hologram of the card; lines 28-33 of col.6 disclose that all the beams have a noise beam inherent in them that is being removed by activating the white light source) where value based on the portions of the signals comprising white noise as recited in the independent claims 12 and 18 (see col.5, lines 63-66 where white light source for directing a beam of light through objective lenses are disclose) but do not disclose generating a number within a random sequence of numbers providing the number within the random sequence of numbers. However Hoffman (5,706,218) disclose generating a number within a random sequence of numbers providing the number within the random sequence of numbers (see abstract;fig.1; col.1, lines 50-67-col.3 where generation of a number within a random sequence number are detailed. It would have been obvious to one of ordinary skilled in the art at the time the invention was made to utilize Hoffman's random number generator's method in Tomko's fingerprint verification method in order to assure that sampling analyzer does not favor either the 1 or the 0 state, thus generating a substantially equal number of 1s and 0s in order to reduce the error percentage within sensing device that captures the finger print and analyzes the authentication of it.

As per claims 14 and 19 Tomko (4,876,725) teach an imaging device used for generating a random number as defined in claims 12 and 18, wherein the imaging device comprises a CCD array for sensing an image and for providing a signal including pixel values for pixels of the sensed image in each of a plurality of rows and columns

relating to rows and column sensed image (see col.6, lines 50-60 where the reflected beams passed through photo-threshold analyzer through a matrix, and matrix involves rows and columns of pixels of the sensed images captured).

As per claims 15 and 20 Tomko (4,876,725) teach an imaging device used for generating a random number as defined in claims 12 and 19, wherein the imaging device comprises a CMOS imaging device/ touch pad (see fig.3a-b and 1; col.5, lines 14-26; col.6, lines 11-27 and 46-50 where the imaging device has a touch pad of the prism and a card 20 as CMOS).

Allowable Subject Matter

5. Claims 2-8, 10, 13 and 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S.Patent No. US (3,913,031) teach pseudo noise modulator.

U.S.Patent No. US (6,215,874 B1) teach random number generator and method for same.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kambiz Zand whose telephone number is (703) 306-4169. The examiner can normally reached on Monday-Thursday (8:00-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

Official (703) 872-9306

Kambiz Zand
02/08/04

GILBERTO BARRON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100